

ROTARY TILLER
5 HP.
MODEL
GIL-39007A

FORM NO. 891-876B

MONTGOMERY
WARD

owner's guide and PARTS LIST



IMPORTANT

READ THIS MANUAL CAREFULLY AND KEEP FOR FUTURE REFERENCE

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IMPORTANT!

Notice to customers in the State of California -
The engine on this unit is **NOT** equipped with a
spark arresting muffler.

WARNING

USE OR OPERATION OF THIS ENGINE ON ANY
FOREST COVERED, BRUSH COVERED, OR
GRASS COVERED LAND WITHOUT A STATE
APPROVED SPARK ARRESTOR IN EFFECTIVE
WORKING ORDER CONSTITUTES A VIOLATION
OF THE LAW OF THE STATE OF CALIFORNIA.

IMPORTANT! Record the unit model number and its serial number on the back page of this manual for future reference when ordering repair parts or identification if unit is lost or stolen.

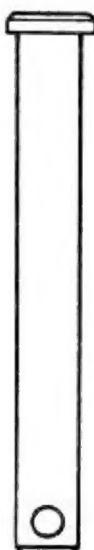
The manufacturer reserves the right to make changes on and to add improvements upon its products at any time without notice or obligation. The manufacturer also reserves the right to discontinue manufacture of any product at its discretion at any time.

HARDWARE BAG CONTENTS

The items illustrated below are used during the assembly of your Tiller. They are drawn actual size and can be helpful in determining the correct hardware needed in each assembly step.



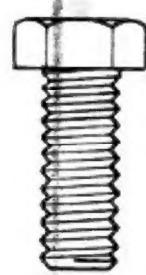
HEX. HD. CAP SCREW
 $\frac{3}{8}$ -24 x 1 1/4
Heat Treated



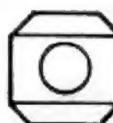
CLEVIS PIN
"Long"



CLEVIS PIN
"Short"



HEX. HD. CAP SCREW
 $\frac{3}{8}$ -16 x 1"



STOP COLLAR



HEX. NUT
 $\frac{3}{8}$ -16
"Coarse Thread"



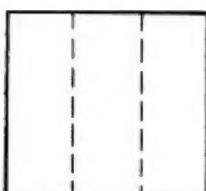
HEX. NUT
 $\frac{3}{8}$ -24
"Fine Thread"



SQ. HD. SET SCREW
 $\frac{1}{4}$ -28 x 1/4



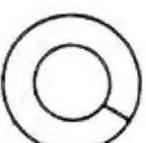
COTTER PIN
 $\frac{3}{32}$ x $\frac{3}{4}$



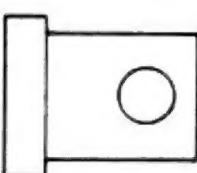
RUBBER
SPACER



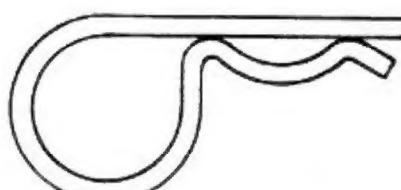
CONTROL KNOB



LOCK WASHER
 $\frac{3}{8}$



PIVOT
BUSHING

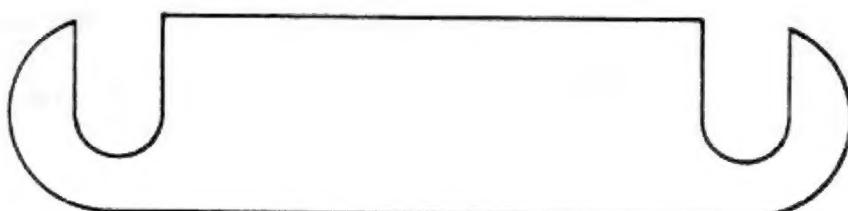


SPRING CLIP



FLAT WASHER
 $\frac{3}{8}$ S.A.E.

ENGINE
SHIM



GENERAL INTRODUCTION

This Owner's Guide has been especially prepared to provide the information needed to assemble and operate your tiller with greater satisfaction. Read this Owner's Guide and the engine instructions carefully. Be sure you know what the controls are for and how they operate. The care your tiller requires is small, but important. Keep it clean and well lubricated. With proper care and operation, as explained in this manual, you will obtain long and efficient service.

Information regarding operation and maintenance of the engine is not included in this manual. A separate instruction manual is included with your tiller and should be consulted for all information concerning engine adjustments and operation.

SAFETY TIPS

Don't Forget



that **SAFETY**
starts with you!

Your rotary tiller was built to the highest standards in the industry. However, **a rotary tiller is only as safe as the operator.** As with any type of power equipment, carelessness or error on the part of the operator can result in injury. Please read and follow these instructions on safe operation and be certain anyone using this rotary tiller is familiar with these simple rules:

- Improper use of the rotary tiller can result in injury. Give complete and undivided attention to the work you are doing.
- Know the controls and how they operate.
- Know how to stop the rotary tiller and engine instantly.

- Disengage power and stop engine before cleaning, removing obstacles, or making adjustment.

- Keep children and pets a safe distance away from rotary tiller.

- Do not allow anyone to operate rotary tiller without proper instruction and supervision.

- Exercise caution to avoid falling.

- Don't start the engine and tines until you are ready to start tilling. Stop the engine whenever you leave the machine.

- Disengage clutch before starting engine. Keep hands, feet and clothing away from power-driven parts.

- Keep rotary tiller in good operating condition and keep safety devices in place.

- Store gasoline in a safe container. Store the container in a cool, dry place. **Not in the house or near heating appliances.**

- Open doors if engine is run in garage. Exhaust gases are dangerous.

- Fill gas tank outdoors. Avoid spilling gasoline. Don't fill tank while engine is running or while you are smoking.

- The replacement of any part on this product by other than the manufacturer's authorized replacement part may adversely affect the performance, durability or safety of this product.

PREPARATION FOR OPERATION

This tiller is shipped in one carton completely assembled except for the handle, control rod, tailpiece, depth control and outer tine hub assemblies. A hardware bag is also furnished which contains all the extra parts and hardware needed to assemble the tiller correctly. **Note: page 3 illustrates the hardware bag contents.** Use this page for correct identification of hardware items used during assembly.

CUSTOMER NOTICE! The engine on this tiller was shipped WITHOUT oil in the crankcase. See engine instructions for proper type oil and crankcase capacity.

IMPORTANT!

All items marked with an asterisk (*) can be found in the hardware bag.

1. Remove tiller and all other parts from the shipping carton.
2. Attach the handle to the handle brackets, Fig. 1. Position handle over brackets and secure, using four (4): $\frac{3}{8}$ -16 x 1" hex. hd. cap screws*, $\frac{3}{8}$ lock washers* and $\frac{3}{8}$ -16 hex. nuts*.
3. Attach the tailpiece to the rear of main frame, Fig. 2.

Remove tiller belt guard. **Loosen**, do not remove the thumb screws.

Pull spring clip from the tailpiece hanger pin and remove hanger pin.

Place tailpiece into opening in rear of main frame. Line up holes and replace the hanger pin as shown in Fig. 2. Secure with the spring clip.

4. Attach the depth control to the tailpiece, Fig. 3. Slide depth control into slot in rear of tailpiece and secure, using the "short" clevis pin* and spring clip*.

NOTE! Refer to the "CONTROLS AND OPERATION" section for the hole position to set the depth control in depending on the soil conditions and tiller speed desired. The bottom hole, Fig. 14, is used for transporting the tiller only.

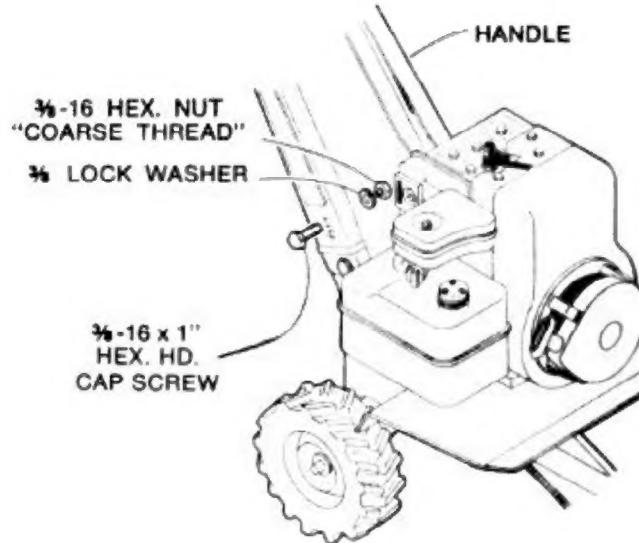


FIG. 1

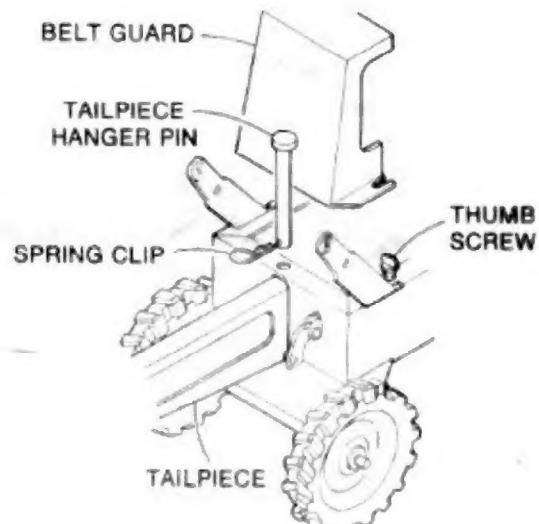


FIG. 2

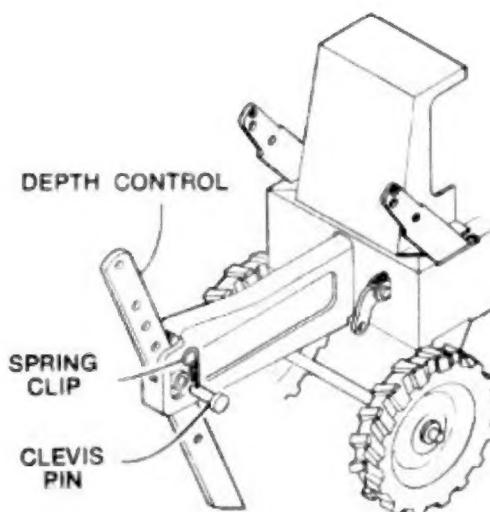


FIG. 3

*This item can be found in the hardware bag.

5. Attach the throttle control to the back side of handle, Fig. 4.

Slide the threaded part of control into slot on the back of handle. Slide the $\frac{3}{8}$ lock washer and $\frac{3}{8}$ -24 hex. nut up the control cable and secure control to handle by tightening the hex. nut to the control from underside of the slot.

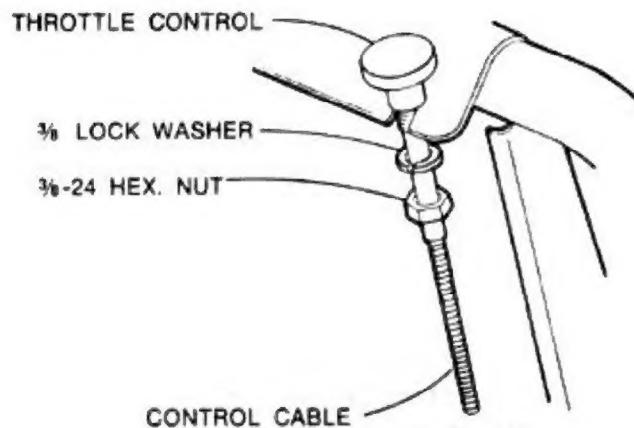


FIG. 4

6. Reposition the outer tine hub assemblies to the proper end of tine shaft, Fig. 5. **Note:** For shipping purposes, this tiller was shipped with the outer tine hub assemblies on the opposite end of the shaft.

Slide each outer tine hub assembly from tine shaft and install onto the opposite end of tine shaft. Be sure the tilling edges (tapered edges) are facing the same forward direction as the inner tine hub assemblies.

When the hole in the hub assembly lines up with the hole in the tine shaft, insert a $\frac{3}{8}$ -24 x $1\frac{3}{4}$ hex. hd. heat treated cap screw* and secure with a $\frac{3}{8}$ lock washer* and $\frac{3}{8}$ -24 hex. nut* ("fine thread").

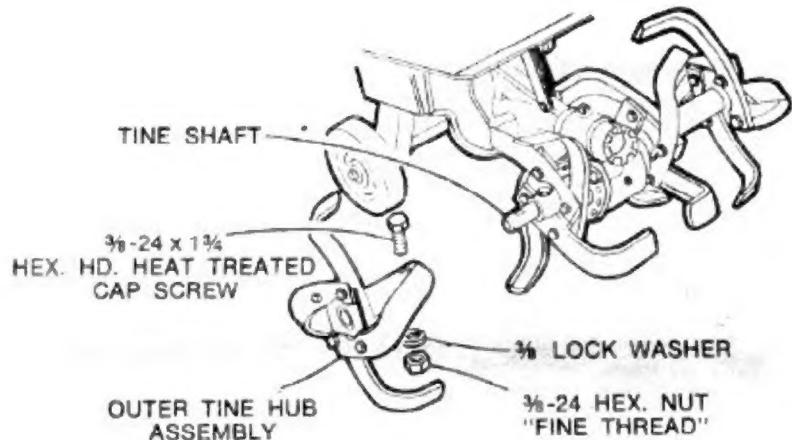


FIG. 5

Assemble the other outer tine hub assembly following the same instructions as outlined above.

7. Attach the control lever assembly to the handle, Fig. 6.

Secure the (2) rubber spacers*, (2) $\frac{3}{8}$ S.A.E. flat washers* and the control lever* to the bracket on the backside of handle, as shown in Fig. 6, using the "long" clevis pin* and a $\frac{1}{8}$ x $\frac{3}{4}$ cotter pin*.

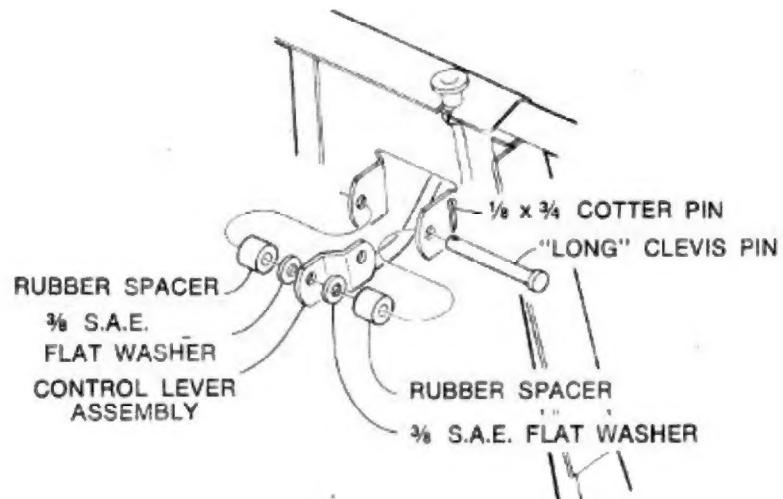
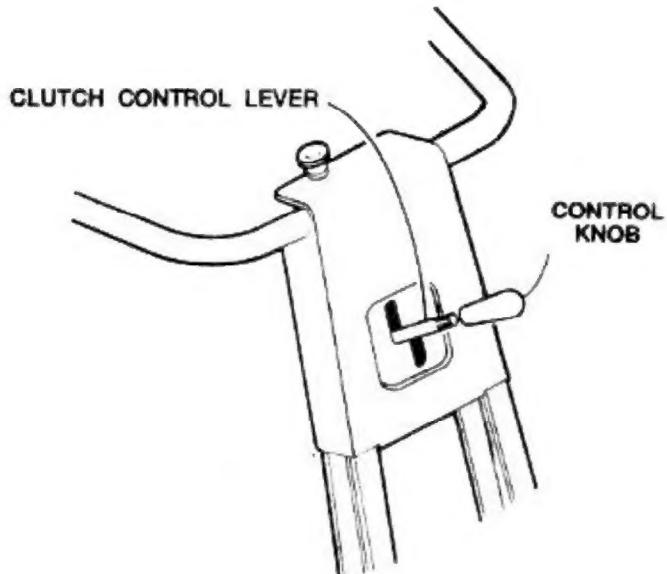


FIG. 6

*This item can be found in the hardware bag.

8. Turn the control knob* onto the the clutch control lever, Fig. 7.

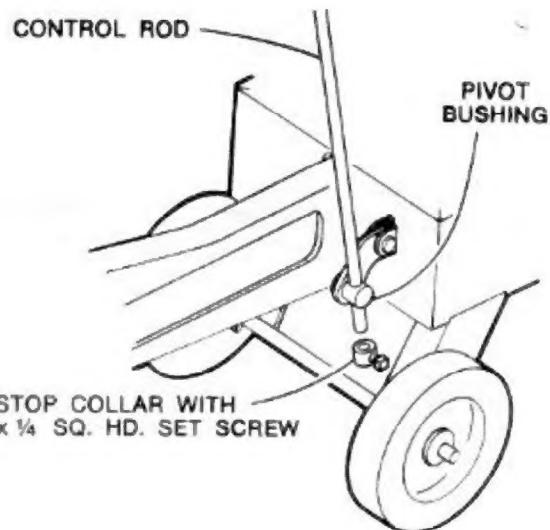


9. Attach the control rod to the bell crank and control lever, Figs. 8, 9 and 10.

A. Insert the pivot bushing* into hole in bell crank, Fig. 8.

FIG. 7

B. Slide the straight end of the control rod through the hole in pivot bushing, Fig. 8.



C. Insert the hooked end of control rod through the hole provided in the control lever on the back-side of handle, Fig. 9, and secure in place with a $3/32 \times 3/4$ cotter pin*.

D. Turn the $1/4$ -28 x $1/4$ sq. hd. set screw*, Fig. 8, into the hole in the stop collar*. **Do not tighten set screw.**

E. Slide stop collar up the control rod (from the bottom) towards the pivot bushing. **Go on to adjustment, next page.**

*This item can be found in the hardware bag.

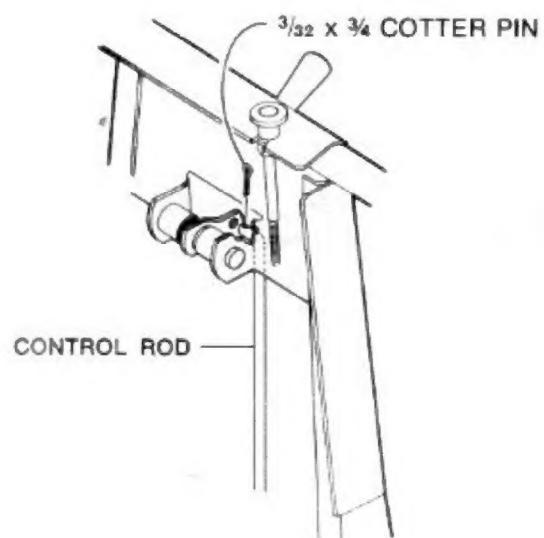


FIG. 9

TO ADJUST:

- A. Move the clutch control lever to the forward position.
- B. Move the stop collar to within $\frac{1}{4}$ " of the pivot bushing, Fig. 10, and tighten the set screw.

To check adjustment: Place the clutch control lever in the neutral position. Turn the engine over slowly to be sure the belts slip on all pulleys. Be sure the spark plug wire has been disconnected to prevent accidental starting.

If tiller moves forward in the neutral position, loosen set screw and move stop collar up slightly. If tiller moves backward in the neutral position, loosen set screw and move stop collar down slightly. Retighten set screw after adjustment is completed.

After satisfactory adjustment has been obtained, reconnect the spark plug wire.

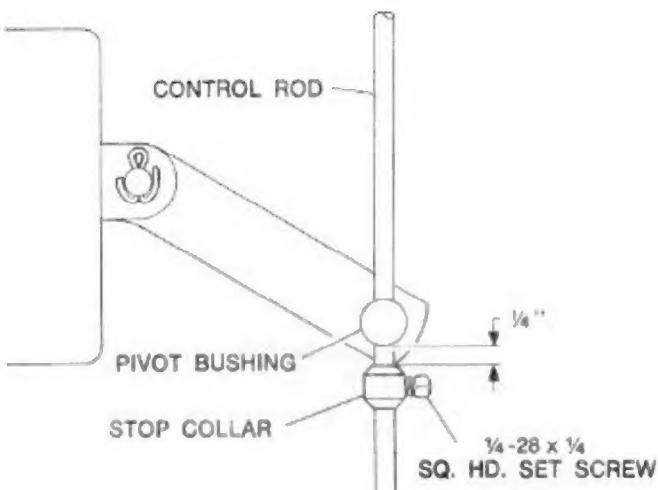


FIG. 10

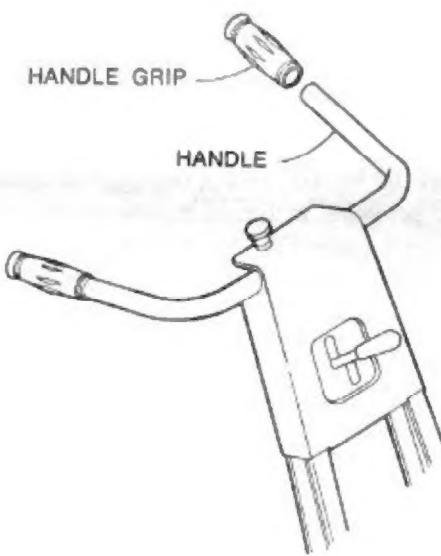


FIG. 11

10. Slide handle grips* onto the handle, Fig. 11. If grips will not slip on completely, tap end of grip with a block of wood and hammer until grip is all the way on.

*This item can be found in the hardware bag.

INITIAL SERVICING

1. Before starting, see engine instructions. Be certain that the engine crankcase is filled with oil and that engine service instructions have been followed completely.
2. Fill fuel tank with a clean, fresh, leaded or lead-free "regular" grade of automotive gasoline. Fill tank completely. **Do not mix oil with gasoline.**
3. Although your tiller was lubricated at the factory, it is well to do it again during initial servicing so as to become familiar with points requiring regular service. Be certain to check oil in gear case. See "Lubrication and Maintenance" section.
4. All bolts and nuts should be checked and tightened during the first two (2) hours of use. Periodic checks should be made thereafter.

CONTROLS AND OPERATION

CLUTCH CONTROL LEVER

The clutch control lever engages forward and reverse drive to the tines and also disengages the drive to the tines. The clutch control lever is located in the center of the handle bar (Fig. 12). To engage forward drive to the tines, move lever to the left and allow it to go forward into bottom of slot. To engage reverse, pull lever back. Lever will not lock in reverse. You must pull lever whenever you want to go in reverse. Neutral is located in the center notch of the slot.

Before starting engine be certain clutch control lever is in neutral position.

CHANGING TINE SPEEDS

The engine pulley and the input pulley on this tiller have three (3) V-belt grooves. The outer groove, Fig. 13, is for the reverse drive belt only. The inner two (2) grooves are for 2-speed combinations. To move the forward drive belt from one groove to another, follow the outlined procedures below.

1. Remove the spark plug wire.
2. Place the clutch control lever in neutral "N".
3. Remove the belt guard.

To move forward drive belt from the inside (faster speed) set of grooves to the middle (slower speed) set of grooves:

4. On the engine pulley, move belt from inside groove to the middle groove.
5. From the left-hand side of input pulley, slide belt out of inside groove towards middle groove, as far as possible. Pull recoil starter rope slowly until belt completely seats itself into the middle groove.

To move forward drive belt from the middle (slower speed) set of grooves to the inside (faster speed) set of grooves:

6. From the left-hand side of input pulley, slide belt out of middle groove, Fig. 13, towards inside groove, as far as possible.
7. While still guiding belt towards the inside groove on input pulley, pull recoil starter rope slowly until belt lifts out of middle groove and completely seats itself in the inside groove. **Note:** This step might be done easier if the clutch control lever was engaged.
8. On the engine pulley, move belt from middle groove to the inside groove. **Note:** To do this, the clutch control lever must be in the neutral "N" position.
9. Reinstall the belt guard.
10. Reattach the spark plug wire.

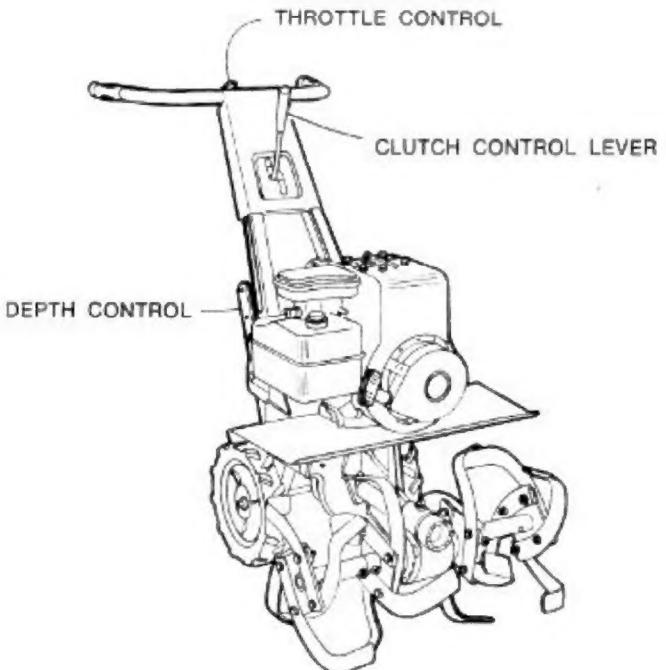


FIG. 12

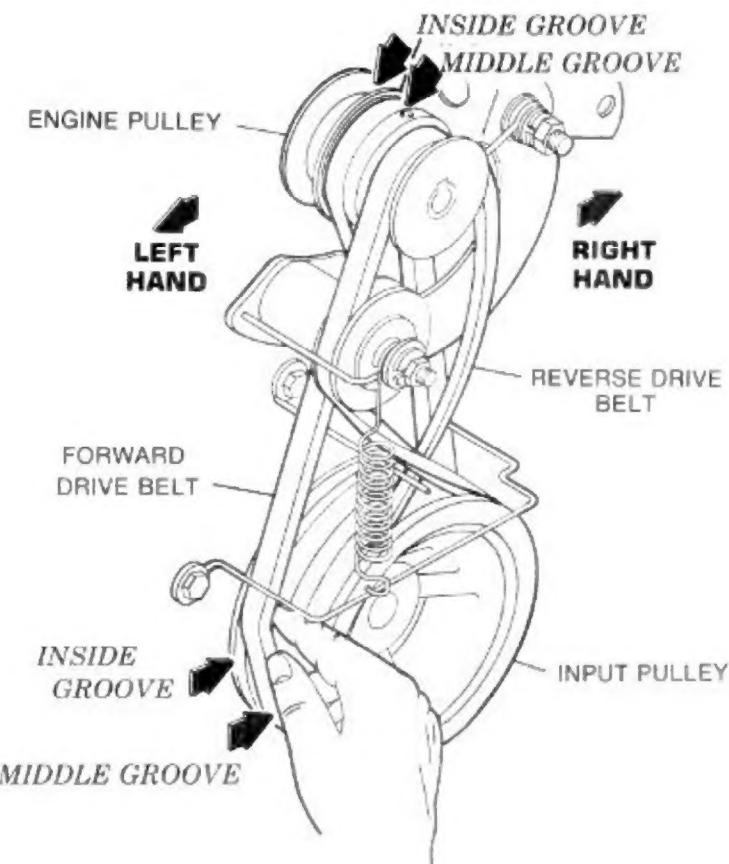


FIG. 13

If belt is too tight to move from one set of grooves to another as outlined above, it may be necessary to loosen the engine bolts and tilt the engine back.

THROTTLE CONTROL

This control regulates the engine speed from idle to fast. It is located on the right side of the handle bar (Fig. 12). To idle engine pull throttle control out. To increase speed push throttle in.

DEPTH CONTROL

The depth control controls the depth and speed (acting as a brake) at which the tiller will operate. It is located in the tailpiece at the rear of the tiller, Fig. 12.

By lowering the setting of the depth control, the forward speed of the tiller is reduced and the working depth of the tines is increased. Raising the setting of the depth control increases the forward speed and reduces the working depth. Refer to Fig. 14 for an explanation of the different hole settings in the depth control.

OPERATING SUGGESTIONS

This tiller will provide excellent rotary tilling for seed bed preparation, mulching or similar chores. Planting of rows in standard widths (36") will enable you to use your tiller for cultivating the soil between the rows. See "Versatile Tine Combinations."

OPERATING TIPS

The forward and penetrating action of the rotary tiller is obtained from the rotating action of the tines in the soil. Do not fight the tiller. Permit the tiller to do the work it was made to do.

When soil conditions are severe and several passes must be made over a certain area, the depth control setting should be lowered each time a pass is made. Further control of the tilling depth and travel speed can be obtained by variation of pressure on the handle. A downward pressure on the handle will increase the working depth and reduce the forward speed. An upward pressure on the handle will reduce the working depth and increase the forward speed. The type of soil and working conditions will determine the actual setting of the depth control and the handle pressure required. A few minutes use will quickly tell what the best setting is for your particular soil conditions.

THIS HOLE IS FOR USE WITH
FURROW OPENER ATTACHMENT
ONLY. DO NOT USE FOR TILLING.

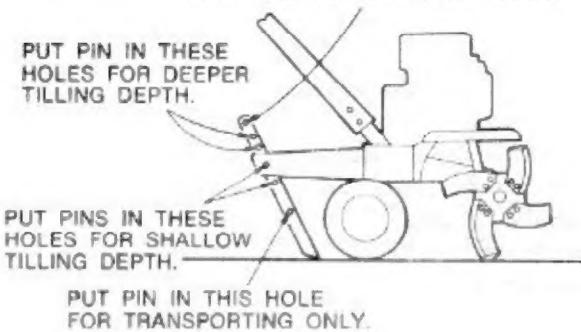


FIG. 14

STARTING YOUR ROTARY TILLER

Now that you have located the controls and understand their operation and function, it is time to start your tiller. Remember, improper use of the tiller could result in injury. Give complete and undivided attention to what you are doing.

Before starting engine, be certain the clutch control lever is in neutral.

1. Refer to the engine STARTING instructions in the engine manual.
2. Pull throttle control about halfway out.
3. Choke the engine. See instructions in the engine manual. Do not choke the engine if you are starting a warm engine.
4. Start engine by pulling starter rope. See engine manual.
5. Shift into forward, neutral and reverse to be certain all three positions operate properly. STOP ENGINE.

If tiller moves forward in the neutral position, loosen set screw and move stop collar up slightly. **If tiller moves backward** in the neutral position, loosen set screw and move stop collar down slightly. Retighten set screw after adjustment is completed.

To Stop Engine:

1. Move the clutch control lever to the neutral position.
2. Pull throttle control all the way out.
3. Push the stop switch against the end of the spark plug.

VERSATILE TINE COMBINATIONS

You have a choice of three (3) different tilling widths (12", 20" or 26") by interchanging the tines pointing in or by removing the outer tine hub assemblies altogether, Fig. 15.

The **12"** tilling width is achieved by simply removing the two (2) outer tine hub assemblies.

The **20"** tilling width is achieved by assembling the outer tine hub assemblies as outlined in the "PREPARATION FOR OPERATION" section.

The **26"** tilling width is achieved by removing two (2) tines (those that point in) from each outer tine hub assembly and transfer these tines, installing them on the opposite side of the tiller. The transferred tines should be pointing away from gear case with the tilling edges (tapered edges) facing the same forward direction as the inner tine hub assemblies. Match symbols, as shown in Fig. 15, for easy changeover.

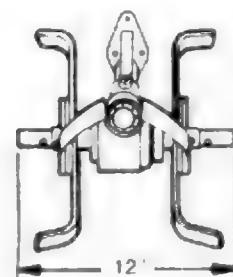
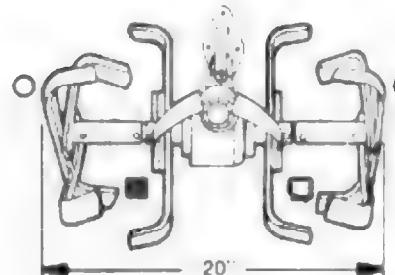
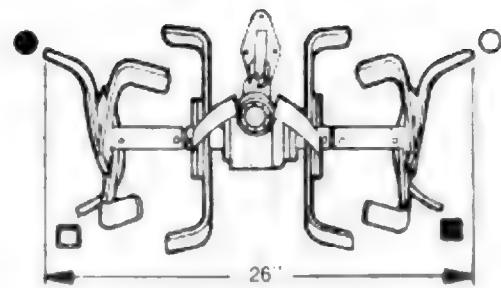


FIG. 15

ADJUSTMENT AND SERVICING

CAUTION: Never attempt to make adjustments on the tiller while it is in operation or while the engine is running. Always turn engine off before attempting to make any adjustment.

GEAR CASE BEARING ADJUSTMENT

The gear case tapered roller bearings may require adjustment after **many** hours of operation. In the rare event that end play develops in the worm shaft, adjust according to the following instructions.

To adjust the worm shaft bearing:

Remove the cotter pin and turn the adjustment plug in as far as possible, then back off one notch and relock with the cotter pin.

IMPORTANT!

This tiller has a worm gear transmission to drive the tines. The gear case will get warm when in use -- too warm to hold your hand on the case. This is a normal condition and will not harm the bearings or gears as long as lubrication instructions are followed.

ADJUSTMENT FOR BELT STRETCH

To compensate for belt stretch, engine shims are furnished with this tiller and are found in the hardware bag that came with the tiller. They are to be inserted between the engine and tine shield (see parts drawing). This helps compensate for natural stretch of the belt.

Set the input pulley belt finger within $1/16"$ to $1/8"$ of the pulley surface with belt fully engaged.

BELT REPLACEMENT

If all the adjustment has been used up, or the belts become excessively worn or break, replacement is required. Order belts by the part numbers provided in the parts list section of this manual. Any other belts will not provide the life or service of the specified belts.

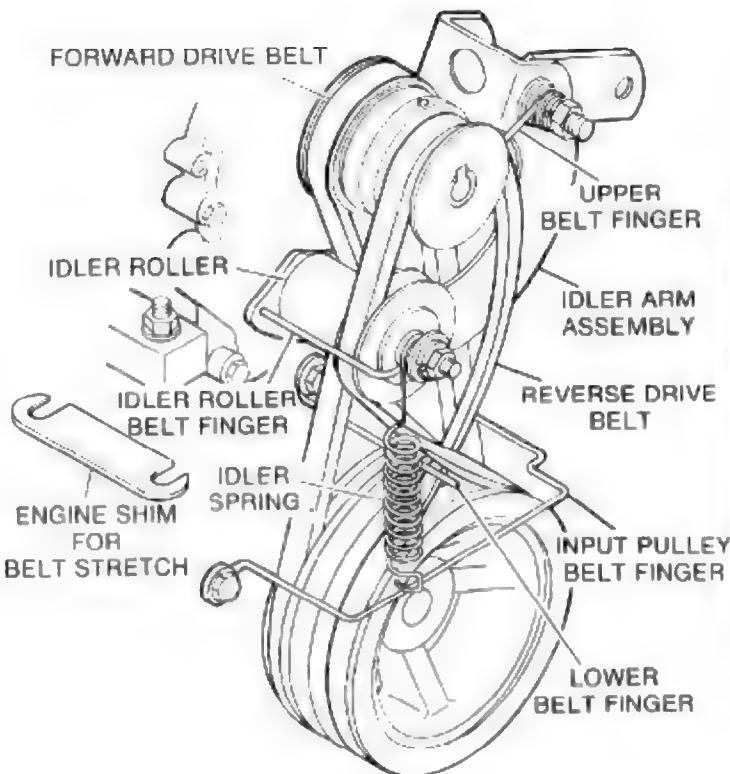


FIG. 16

To replace the forward drive belt:

1. Remove the belt guard.
2. Unhook the long end of spring from the idler arm assembly, Fig. 16.
3. Remove the input pulley belt finger, Fig. 16.
4. Remove the belt finger from the idler roller, Fig. 16.
5. Remove the reverse drive belt. **Notice** how the reverse belt is twisted around the pulleys, Fig. 16.
6. Remove the forward drive belt from pulleys and replace with new belt, Fig. 16.
7. Replace the reverse drive belt.
8. Replace the belt finger onto the idler roller.
9. Replace the input pulley belt finger.
10. Replace the idler spring.
11. Adjust the belt fingers so there is $1/16"$ to $1/8"$ clearance between belt finger and belt with belt fully engaged.
12. Replace the belt guard.

To replace the reverse drive belt:

1. Remove the belt guard.
2. Unhook the long end of spring from the idler arm assembly, Fig. 16.
3. Remove the input pulley belt finger, Fig. 16.
4. Remove the belt finger from the idler roller, Fig. 16.
5. Remove the reverse drive belt from pulleys and replace with new belt, Fig. 16. **Notice** how the reverse belt is twisted around the pulleys, Fig. 16.
6. Replace the belt finger onto the idler roller.
7. Replace the input pulley belt finger.
8. Replace the idler spring.
9. Adjust the belt fingers so there is $1/16"$ to $1/8"$ clearance between belt finger and belt with belt fully engaged.
10. Replace the belt guard.

LUBRICATION AND MAINTENANCE

1. **Engine** — The engine must be in a level position to check the oil level in the engine crankcase. Check every 5 hours of operation. Add oil as necessary to keep level full to point of overflowing. Use S.A.E. #30 wt. oil. Before removing the oil fill plug, clean area around plug to prevent dirt from entering oil fill hole. **Note:** Refer to the engine operating instructions for all maintenance and lubrication instructions and requirements.
2. **Gear Case** — To check the oil level of the tiller gear case, the tiller must be on a level surface. To check oil level, wipe dirt from around the plug, Fig. 17, and remove plug. Oil should be level with the bottom of the level plug hole. If it isn't, add lead base (EP) S.A.E. 140 heavy-duty oil (Part #4890) to bring oil up to the proper level. Replace level plug after oil begins to run out of the level plug hole. Check oil level after every 25 operating hours, or if unit shows signs of leakage.
3. **Idler Roller** — Lubricate the idler roller, Fig. 16. Saturate the bearing wick, Fig. 18, with S.A.E. #30 wt. oil once a season for average home use.
4. **Wheels** — Lubricate the wheels periodically using S.A.E. #30 wt. oil.
5. **Vented Filler Plug** — Periodically check to be sure the breather hole on top of plug is free of dirt.

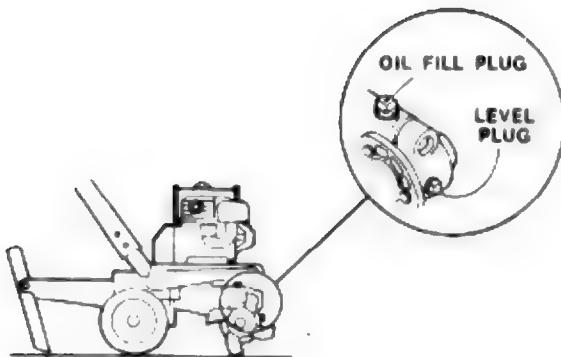


FIG. 17



FIG. 18

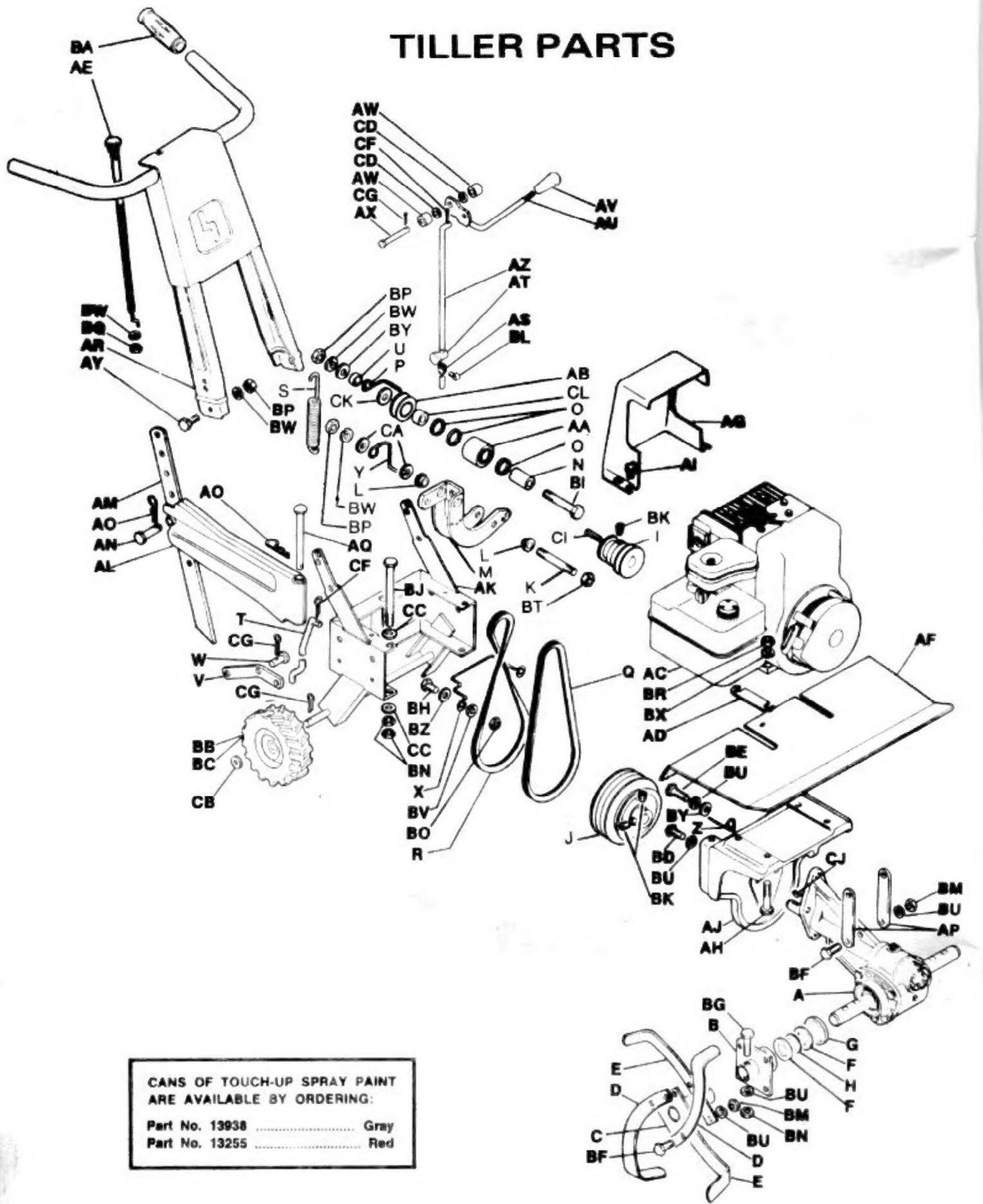
1. Refer to the engine manual for engine storage instructions.
2. Drain gasoline from fuel tank.
3. Run engine until it stops.
4. Cover exposed metal surfaces with a thin coat of S.A.E. #30 wt. oil.
5. Lubricate per instructions under "LUBRICATION AND MAINTENANCE".
6. Before using the tiller again, check all lubrication points, fill fuel tank and follow other instructions in this Owner's Guide.

STORAGE

For short term storage clean off the tiller and store in a dry place.

If tiller is not to be used for an extended period of time it should be serviced and stored in a dry place.

TILLER PARTS



CANS OF TOUCH-UP SPRAY PAINT
ARE AVAILABLE BY ORDERING:

Part No. 13938 Gray
Part No. 13255 Red

TILLER PARTS LIST

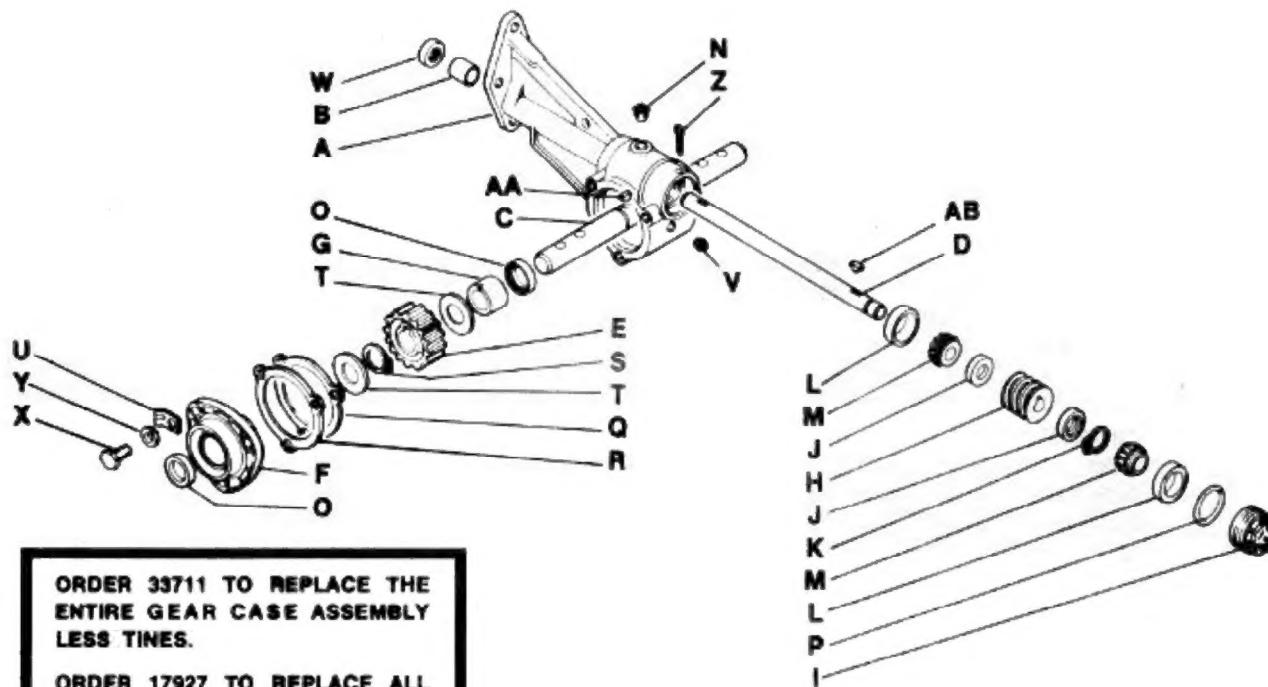
Ref. Let.	Part No.	Description	Qty.	Ref. Let.	Part No.	Description	Qty.
A	33711	Gear Case Assembly	1	AT	6168	Pivot Bushing	1
B	6098	Inner Tine Hub Assembly	2	AU	33765	Clutch Lever Assembly	1
C	6124	Outer Tine Hub Assembly	2	AV	2555	Lever Knob	1
D	3389	Tine — R.H.	8	AW	16136	Rubber Spacer	2
E	3390	Tine — L.H.	8	AX	16859	Clevis Pin	1
F	11246	Inner Felt Seal	4	AY	*70233	Cap Screw, Hex. Hd., $\frac{3}{8}$ -16 x 1", Plated ..	4
G	1056	Intermediate Felt Seal	2	AZ	33764	Control Rod	1
H	1088	Washer	2	BA	1183	Grip	2
I	12521	Engine Pulley	1	BB	28613	Tire & Wheel Assembly — R.H.	1
J	6149	Input Pulley	1	BC	28701	Tire & Wheel Assembly — L.H.	1
K	6162	Idler Arm Pivot Shaft	1	BD	*70236	Cap Screw, Hex. Hd., $\frac{3}{8}$ -16 x 1 $\frac{1}{8}$	3
L	6164	Idler Arm Bushing	2	BE	*70243	Cap Screw, Hex. Hd., $\frac{3}{8}$ -16 x 1 $\frac{3}{8}$	1
M	16154	Idler Arm Assembly	1	BF	*70239	Cap Screw, Hex. Hd., $\frac{3}{8}$ -16 x 1 $\frac{1}{4}$	18
N	6181	Shaft — Idler	1	BG	*70301	Cap Screw, Hex. Hd., $\frac{3}{8}$ -24 x 1 $\frac{3}{4}$	4
O	6695	Washer	3	BH	*70101	Cap Screw, Hex. Hd., $\frac{1}{4}$ -20 x 1, Plated ..	2
P	6232	Belt Finger	1	BI	*70276	Cap Screw, Hex. Hd., $\frac{3}{8}$ -16 x 3 $\frac{3}{4}$, Plated ..	1
Q	†1110	V-Belt, $\frac{1}{2}$ " wide x 9/32" thick x 35" long	1	BJ	*70310	Cap Screw, Hex. Hd., $\frac{3}{8}$ -24 x 5 $\frac{1}{2}$, Heat Treated	2
R	†6163	V-Belt, $\frac{3}{8}$ " wide x 7/32" thick x 37" long	1	BK	*70498	Set Screw, Socket Hd., 5/16-18 x 5/16, Heat Treated	3
S	13301	Spring	1	BL	*70050	Set Screw, Sq. Hd., $\frac{1}{4}$ -28 x $\frac{1}{4}$, Plated & Heat Treated	1
T	16149	Link	1	BM	*70552	Nut, Hex., $\frac{3}{8}$ -16	18
U	1025	Pivot Bushing	1	BN	*70554	Nut, Hex., $\frac{3}{8}$ -24	8
V	16148	Pivot Arm	1	BO	*70545	Nut, Hex., $\frac{1}{4}$ -20, Plated	2
W	2479	Clevis Pin	1	BP	*70553	Nut, Hex., $\frac{3}{8}$ -16, Plated	6
X	13575	Belt Finger	1	BQ	*70555	Nut, Hex., $\frac{3}{8}$ -24, Plated	1
Y	6159	Belt Finger	1	BR	*70549	Nut, Hex., 5/16-18, Plated	4
Z	12363	Belt Finger	1	BT	*70583	Nut, Hex. Jam, $\frac{1}{2}$ -20, Plated	1
AA	6681	Idler Roller Assembly	1	BU	*70648	Lock Washer, $\frac{3}{8}$	26
AB	12438	Idler Assembly — Reverse	1	BV	*70643	Lock Washer, $\frac{1}{4}$, Plated	2
AC	**	Engine, 5 HP. B&S, Model 130202-0135-07	1	BW	*70649	Lock Washer, $\frac{3}{8}$, Plated	7
AD	6367	Engine Shim	4	BX	*70646	Lock Washer, 5/16, Plated	4
AE	14465	Throttle Control	1	BY	*70703	Flat Washer, $\frac{3}{8}$, Plated	3
AF	3719	Tine Shield	1	BZ	*70699	Flat Washer, $\frac{1}{4}$, Plated	2
AG	6189	Belt Guard	1	CA	*70701	Flat Washer, 5/16, Plated	2
AH	6968	Cap Screw, Hex. Hd.	4	CB	*70707	Flat Washer, $\frac{1}{2}$, Plated	2
AI	6891	Shoulder Thumb Screw	2	CC	*70686	Flat Washer, $\frac{3}{8}$, S.A.E.	4
AJ	6130	Engine Base	1	CD	*70687	Flat Washer, $\frac{3}{8}$, S.A.E., Plated	2
AK	33718	Main Frame Assembly	1	CF	*70741	Cotter Pin, 3/32 x $\frac{3}{4}$, Plated	2
AL	12234	Tailpiece Assembly	1	CG	*70721	Cotter Pin, $\frac{1}{8}$ x $\frac{3}{4}$, Plated	4
AM	6110	Depth Control	1	CI	*70799	Key, Square, 3/16 x 3/16 x 2	1
AN	1268	Clevis Pin	1	CJ	*70822	Key, Hypro, 3/16 x $\frac{5}{8}$	1
AO	1063	Spring Clip	2	CK	6694	Washer	1
AP	3449	Gear Case Support	2	CL	6257	Idler Shaft — Reverse	1
AQ	4656	Tailpiece Hanger Pin	1				
AR	33766	Handle Assembly	1				
AS	6186	Stop Collar	1				

**Available from service department.

*Common hardware. May be purchased locally.

[†]Belt size stated is for general reference only. It is important that belts be replaced by specific part number, not by general category size as original equipment belts are designed for specific length and construction. It is important for safe and satisfactory performance of your equipment to use original equipment belts.

GEAR CASE PARTS AND PARTS LIST



ORDER 33711 TO REPLACE THE ENTIRE GEAR CASE ASSEMBLY LESS TINES.

ORDER 17927 TO REPLACE ALL GEAR CASE SEALS AND FELTS.

ORDER 1/2 PINT CANS OF 4690 GEAR LUBE (S.A.E. #140 EP LEAD BASE) FOR GEAR CASE.

Ref. Let.	Part No.	Description	Qty.
A	6100	Gear Case Assembly w/Bushing	1
B	1024	Bushing	1
C	1001	Tine Shaft	1
D	1002	Worm Shaft	1
E	33566	Worm Wheel	1
F	33253	Cover — Gear Case	1
G	33250	Tine Shaft Bushing	1
H	1003	Worm	1
I	1014	Adjustment Plug	1
J	6824	Worm Spacer	2
K	1042	Retaining Ring	1
L	1044	Worm Shaft Bearing Cup	2
M	1140	Worm Shaft Bearing Cone	2
N	1034	Vent Plug Assembly	1
O	1054	Tine Shaft Seal	2
P	1057	O-Ring	1
Q	6112	Cover Gasket	1
R	6113	Cover Gasket	1-3
S	1043	Retaining Ring	1
T	3453	Washer	2
U	33251	Lug Washer	3
V	1104	Pipe Plug	1
W	1117	Seal	1
X	*70150	Cap Screw, Hex. Hd., $\frac{3}{8} \times 1\frac{1}{4}$, Heat Treated	3
Y	*70645	Lock Washer, $\frac{3}{8} \times \frac{1}{4}$	3
Z	*70721	Cotter Pin, $\frac{3}{16} \times \frac{1}{4}$, Plated	1
AA	*70816	Key, Woodruff, $\frac{1}{2} \times \frac{3}{8}$, Heat Treated	1
AB	*70822	Key, Hypo, $\frac{1}{2} \times \frac{3}{8}$	1

*Common hardware. May be purchased locally.

SERVICE NATIONWIDE



The merchandise you have purchased from us has been carefully engineered and manufactured under Wards rigid quality standards and should give you satisfactory and dependable operation. However, like all mechanical merchandise, it may occasionally require adjustment or maintenance. Should you ever need technical assistance or replacement parts, please contact or write your nearest Wards Retail Store, Service Center, Catalog Store or Catalog House.

Provide the following:

1. Model, serial number and all of the other data shown on the model plate on the rotary tiller and the engine.
2. The date and the Wards branch from which you purchased your merchandise.
3. State briefly the trouble you are having.
4. When requesting replacement parts, be sure to give the part number and the name of the part as shown in the parts list.

If you order by mail, you will pay the transportation charges from the shipping point.